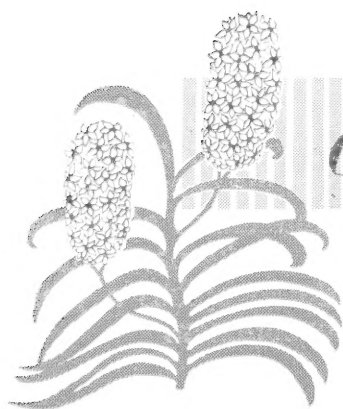


Vandas
for
the
Amateur



Oscar M. Kirsch

ORCHID GROWER SINCE 1915

Vandas For The Amateur

Introduction

Since Vandas are one of the last large orchid families to attain popular favor, the requirements for their successful cultivation are not as widely known as the needs of other orchid tribes. Vandas are found from the Indian subcontinent on the west to New Guinea and the Philippines in the east. They range as far north as the Himalayan mountain chain and its extensions into Burma, Siam and Indo-China. The Islands of Indonesia along the equator form their southern boundary.

A plant family covering such a large area could hardly be expected to accept the same treatment for all its many species, particularly if we take into consideration the differences in elevation, temperature and rainfall distribution.

To point out just two extremes, *Vanda coerulea*, the progenitor of all our blue hybrids, reaches elevations close to the frost line. In fact, plants have been collected in areas where a mild frost is not unusual. The precipitation ranges from excesses during the monsoon season to no rain at all during parts of the year.

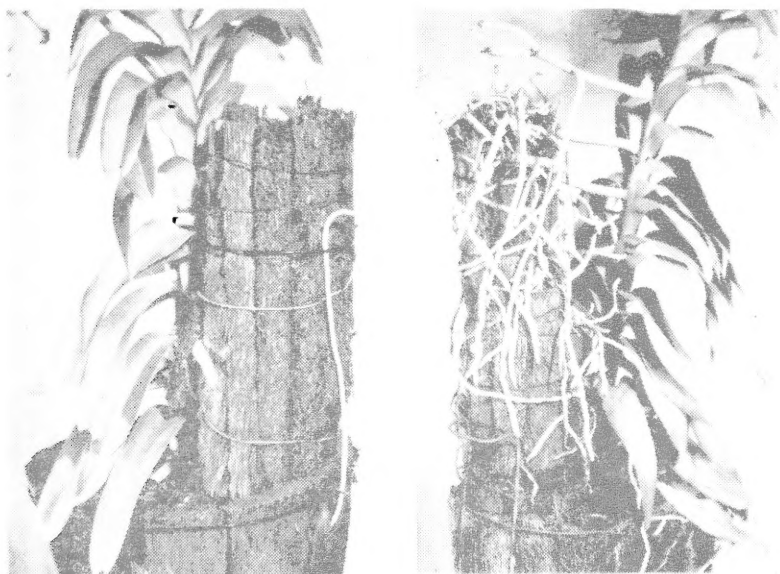
Almost the exact opposite is *Vanda Sanderiana*, probably the most important parent in the breeding of Vandas. It was first found on trees overhanging the beach near Davao on Mindanao, the southernmost island in the Philippine chain, close to the equator, in an area of very heavy rainfall during most of the year. Its long trailing roots were easily within reach of salt spray from the ocean.

To provide ideal conditions for plants of such different backgrounds would go beyond the facilities of most growers. Hybrids, the result of cross breeding, do not make such exacting demands, and do not have the rigidly fixed blooming season of the species. They also produce an abundance of colors and shapes far beyond the range of the parent material. Production of 8 to 10 flower spikes a year by some hybrids is not at all uncommon.

Growth Habits

The vertical or monopodial growth of *Vandas* and their related species differs from the horizontal or sympodial growth of most other orchids in some very important respects. While a *Cattleya* or *Dendrobium* produces a new set of roots with the formation of each new pseudobulb, the root growth of *Vandas* is spread out all along its stem. In its natural state a mature plant will send out roots for many yards, clinging to any object that is handy. The rain and dew collecting on the roots keep the plant well watered and the bird droppings and debris falling among the roots keep it well fed.

Conditions in the average hothouse make it impossible to allow the plants such freedom. This spreading habit would make it very difficult to keep them properly watered and entirely impossible to keep them fed. To use their vigorous root growth to advantage we find it very beneficial to provide a simulated tree trunk as soon as roots are produced higher up on the plant. We fashion this trunk by



Left: Simulated tree trunk made by tying tree fern strips around a redwood stick with wire. Right: Roots growing around and into this trunk.

tying tree fern strips around a redwood stick. Where tree fern is not available a little rough osmunda fibre should serve the same purpose. The height of this trunk is about two-thirds the height of the plant. It can be lengthened as the plant grows taller.

We prefer this made-up trunk to a real tree fern stump, because it permits the plants to send **their** roots into it through the spaces between the strips and makes feeding and watering easier. While Vanda roots are very brittle when short, they are easily twisted around their own axis in any direction when at least a foot long. This makes it simple to direct them back to the trunk, where they can be properly controlled.

Compost

Small plants, up to 3-inch pots grow very well in a rough grade of osmunda. In transplanting mature Vandas it is important to keep in mind that roots that grew in the open will surely rot if buried by compost not well aerated.

In nature the roots of Vandas are in contact with plenty of air. This is an important point to remember when growing them in confinement. We use for our mature plants a mixture of Hawaiian tree fern fibre and charcoal chips. Where this fibre is not available, a mixture of broken crocks, chunks of charcoal and pieces of bone with only a little rough fibre, will provide a compost that can be kept airy enough to attract the roots. A tightly packed compost will force the roots to go elsewhere for air and results in a poor root system and, as a result, a weak, spindly plant.

Feeding

Vandas need a good deal of feeding. A definite balance between light, water and food must not be ignored. A newly potted plant, not as yet established, needs shade, moist surroundings, little water and no food. After the plant establishes itself, light, food and water must be gradually increased.

Our seedlings are fed liquid food once every two weeks. There are many good preparations on the market. Liquid poultry manure has proven quite satisfactory, if properly diluted. Mature plants can be fed either liquid or solid plant food. It goes without saying that plants should never be fed when they are dry. The results might be burns on roots and foliage. If overfed, plants develop too succulent foliage and are easy prey to the various types of diseases to which all plants are subject.

Temperature, Air and Water :

Hybrid Vandas are far less exacting in their requirements concerning air, water and temperature than are the average species. They are well satisfied with a night temperature of 60° F. The day temperature can rise to almost any height, provided an abundance of fresh, moist air is available. Since it would be difficult in a very dry climate to maintain the necessary humidity and still provide an abundance of fresh air, adequate shade will have to be provided to reduce the temperature and evaporation. While Vandas enjoy a nice over-all shower during the sunny part of the year, during the dull months water should be applied sparingly and to the roots only. Water remaining in the leaf sockets for too long a period can cause rot, not only of the flower buds, but of the plant as well. In short, plenty of water during the warm growing season, and just enough during the dull part of the year, fresh air at all times and a temperature of not less than 60° F. should satisfy practically all of our modern hybrids.

Insect Pests

Vandas suffer from insect infestations no more than do other orchids. Scale insects probably do the most damage. There are many insecticides on the market to keep them under control. If the application of an oil spray is called for, make certain that your plants have been thoroughly watered several hours before. A plant lacking moisture will absorb it through the foliage as well as through the roots. Even a small amount of mineral oil so absorbed into the plant body will cause very serious burns which may be fatal. It is a good practice to add a tablespoon of urea or some other easily dissolved plant food to each gallon of your insecticide. By doing this you feed your plants as well as rid them of insects.

How To Select Vandas

The steadily increasing number of hybrids produced, make the selection of the most desirable types a bewildering task for the average amateur. Large blocks of plants of the same variety, with a limit on the number of varieties carried, are the aim of most commercial cut flower producers. The amateur can afford to stress variety; variety not only in color but also in size and shape.

While recently the trend in Vanda production has been toward hybrids of *V. Sanderiana*, the real connoisseurs have, of late, rediscovered the charm of the many smaller-flowering types, since they lend themselves far better to interesting arrangements. The dwarf growing types are also easier to use as flowering house-plants. The large blooming types are, of course, very showy and excellent material for corsage work. The best advice to give a novice in the Vanda field is to acquire a few plants of distinctly different types and in different age groups. In this way the needs of the various sizes and types are most easily learned and taste and experience will show the way from there on.

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Something About The Author

The author, Oscar M. Kirsch, is an orchid breeder of long standing and wide experience. He received his early training at the municipal plant nurseries of Vienna, the Austrian State Horticultural School at Eisgrub, and the world-famous gardens of Baron Alfons Rothschild at the Hohe Warte in Vienna.

He arrived in the United States in 1924 and rounded out his experience at such well-known horticultural establishments as Julius Roehrs Company in Rutherford, New Jersey, the Arnold Arboretum of Harvard University in Boston, and Armacost and Royston in Los Angeles.

The next assignment was the management of the famous Frank C. Atherton orchid collection in Honolulu and the hybridization work carried on there for 14 years. After Mr. Atherton's death, Mr. Kirsch went into business for himself. The large number of excellent hybrids registered by him are probably the best proof that his efforts in the horticultural field have been noteworthy.

